

### **REMARKS**

The present Amendment amends claim 13 and leaves claims 2-12 and 14-23 unchanged. Therefore, the present application has pending claims 2-23.

Claim 13 stands objected to due to informalities noted by the Examiner in paragraph 4 of the Office Action. Amendments were made to claim 13 to correct the informalities noted by the Examiner. Therefore, this objection is overcome and should be withdrawn.

Claims 2, 3, 5, 8 and 20-23 stand rejected under 35 USC §102(b) as being anticipated by Sindhu (U.S. Patent No. 5,905,725); claims 7 and 15-18 stand rejected under 35 USC §103(a) as being unpatentable over Sindhu in view of Kim (U.S. Patent No. 7,394,825); and claim 9 stands rejected under 35 USC §103(a) as being unpatentable over Sindhu in view of Spinney (U.S. Patent No. 5,414,704).

Applicants submit that the Kim reference is not an appropriate reference to be used for obviousness type purposes to reject claims 7 and 15-18 of the present application under 35 USC §103(a) being that the present application claims a priority date which predates the effective date of Kim. Therefore, this rejection is rendered moot. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

To perfect Applicants claim of priority, a Sworn English Translation of the priority document is being prepared and will be filed as soon as possible.

The rejection of claims 2, 3, 5, 8 and 20-23 under 35 USC §102(b) as being anticipated by Sindhu, and the rejection of claim 9 under 35 USC §103(a) as being unpatentable over Sindhu in view of Spinney are traversed

for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in the claims are not taught or suggested by Sindhu or Spinney whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw these rejections.

The present invention is directed to a packet communication device.

According to the present invention the packet communication device includes a plurality of line interfaces capable of reception or transmission of a packet, a plurality of ports to which said plurality of line interfaces are connected and to which at least one functional processor to be used to perform functional processing on an incoming packet received by any of said plurality of line interfaces can be connected as needed, a function item judgment unit for judging a function item to be required for said incoming packet, a forwarding information generator for determining a forwarding port for said incoming packet in accordance with said function item obtained from judging by said function item judgment unit and imparting to said incoming packet forwarding information for designating said forwarding port, and a forwarding path switching unit for switching a forwarding path when forwarding said incoming packet among said plurality of ports based on said forwarding information.

Further, according to the present invention when said function item judgment unit has judged that a plurality of functional processings are required for said incoming packet, the plurality of forwarding information corresponding to functional processors capable of executing said required

functional processings is imparted to said incoming packets at the forwarding information generator in order to forward said incoming packets successively to a plurality of ports to which the functional processors capable of executing said required functional processings are connected respectively.

Thus, according to the present invention a packet communication device of minimum subset structure is provided having only a simple packet forwarding function wherein the addition and removal of a function can be easily performed.

The above described features of the present invention are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the above described features of the present invention of are not taught or suggested by Sindhu or Spinney whether taken individually or in combination with each other as suggested by the Examiner.

Sindhu discloses a function of a route look-up engine that performs a tree based search according to key information in a packet and returns a result which includes an input port associated with a destination.

However, Sindhu does not teach or suggest the features of the present invention that judges whether a header which is imparted to the packet forwarded to a Functional Processor (FP) and that judges whether forwarding the packet to the FP in a case of forwarding the header. An object of the FP in the present invention is to perform packet processing. Contrary to the present invention an object of the handler 304 in Sindhu is to output the packet to input switch 100, so the FP of the present invention differs from the handler 304.

Further, Sindhu discloses switch 100 which reads a data (the key) from the first data block in the packet, and the packet outputs another module which is a controller 106, and the controller 106 determines an output port associated with the destination. Thus, in Sindhu the packet is forwarded to an output port which is determined and the packet is certainly outputted.

However, in the present invention two different cases are addressed with respect to incoming packet wherein the packet is forwarded into at least one of the FP, or not forwarded to a FP.

Sindhu also discloses that the route look-up engine 110 provides only a function for determining the output port. Sindhu discloses that the incoming packet includes a plurality forwarding information.

However, the Source ID, Flow ID and packet length which are described in Sindhu differ from the plurality forwarding information of the present invention as recited in the claims. Even if it could be argued that Sindhu teaches forwarding information as in the present invention, surely Sindhu does not teach or suggest a forwarding information renewal unit as in the present invention. This is true being that in Sindhu the route look-up engine cannot impart plurality forwarding information in the incoming packet as in the present invention.

The above described deficiencies of Sindhu are not supplied by Spinney. Thus, combining the teachings of Sindhu and Spinney in the manner suggested by the Examiner in the Office Action does not teach or suggest the features of the present invention.

Spinney is merely relied on by the Examiner for an alleged teaching of a function item judgment unit. However, even if such were true Spinney does

not supply the above noted deficiencies of Sindhu. As such combining Spinney with Sindhu in the manner suggested by the Examiner in the Office Action does not teach or suggest the features of the present invention as recited in the claims.

Thus, each of Sindhu and Spinney fails to teach or suggest a function item judgment unit for judging a function item to be required for said incoming packet, a forwarding information generator for determining a forwarding port for said incoming packet in accordance with said function item obtained from judging by said function item judgment unit and imparting to said incoming packet forwarding information for designating said forwarding port, and a forwarding path switching unit for switching a forwarding path when forwarding said incoming packet among said plurality of ports based on said forwarding information as recited in the claims.

Thus, each of Sindhu and Spinney fails to teach or suggest that when said function item judgment unit has judged that a plurality of functional processings are required for said incoming packet, the plurality of forwarding information corresponding to functional processors capable of executing said required functional processings is imparted to said incoming packets at the forwarding information generator in order to forward said incoming packets successively to a plurality of ports to which the functional processors capable of executing said required functional processings are connected respectively as recited in the claims.

Therefore, since each of Sindhu and Spinney fails to teach or suggest the features of the present invention as recited in the claims, whether these references are taken individually, or are combined in the manner suggested

by the Examiner in the Office Action, said references do not anticipate nor render obvious the claimed invention. Accordingly, reconsideration and withdrawal of the rejection of claims 2, 3, 5, 8 and 20-23 under 35 USC §102(b) as being anticipated by Sindhu, and reconsideration and withdrawal of the rejection of claim 9 under 35 USC §103(a) as being unpatentable over Sindhu in view of Spinney are respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 2-23.

Applicants acknowledge the Examiner's indication in paragraph 10 of the Office Action that claims 12-14 are allowed and claims 4, 6, 10 and 11 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Applicants will amend said claims to be rewritten in independent form including all the limitations of the base claim and any intervening claims if it is ultimately decided that the base claims are not allowable.

In view of the foregoing amendments and remarks, Applicants submit that claims 2-23 are in condition for allowance. Accordingly, early allowance of the present application based on claims 2-23 is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any

overpayment of fees, to the deposit account of BRUNDIDGE & STANGER,  
P.C., Deposit Account No. 50-4888 (1213.43382X00).

Respectfully submitted,

BRUNDIDGE & STANGER, P.C.

A handwritten signature in black ink, appearing to read 'Carl I. Brundidge', is written over a horizontal line.

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